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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/801,340

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Don M. Simpson

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09/13/2006

KUNZLER & ASSOCIATES  
8 EAST BROADWAY  
SUITE 600  
SALT LAKE CITY, UT 84111

EXAMINER

NGUYEN, CAM LINH T

ART UNIT

PAPER NUMBER

2161

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/801,340

Applicant(s)

SIMPSON ET AL.

Examiner

CamLinh Nguyen

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 5, 8, 12 - 17, 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 8, 12 - 17, 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is response to amendment filed on 7/13/2006.
2. Claims 6, 7, 18, and 19 have been cancelled. Claims 1 – 5, 8 – 17, 20 - 22 are currently pending for further processing.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 5, 8 – 17, 20 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over David Warthen (U.S. 6,584,464 B1) in view of Oyanagi et al (U.S. 4,815,005).

♦ As per claims 1, 13,

David Warthen (U.S. 6,584,464 B1) discloses a method and system (Fig. 1, 5) for identifying objects referenced in a stream of text, comprising:

- “An input pipeline configured” corresponds to the client interface that allow the user to input information into the system (See Fig. 1b, element 60, col. 3, lines 64 - 67 of Warthen).
- “A text analysis module” corresponds to the “question-processing engine” (See Fig. 5, element 30, col. 5, lines 26 – 67 of Warthen).

- “An object association module” corresponds to the “matcher 165 in Fig. 5”  
(See col. 5, lines 59 – col. 6, lines 8 of Warthen).
- “Receiving an incoming stream of text” See Fig. 2 of Warthen. The “stream of text” corresponds to the “query” such as a question that is entered to the computer system (See claim 2 of Warthen).
- “Tokenizing the stream of text into individual words” See claim 3, col. 6, lines 58 – 59 of Warthen.
- “Constructing word patterns of one or more consecutive words from the stream of text” See Fig. 4, element 114, Fig. 5, element 130, col. 8, lines 12 – 15, 27 – 29.
- “Consulting a semantic network to automatically find a match between one or more word patterns in the incoming stream of text and a word pattern in the semantic network, such that each word in the incoming stream is searched once in the semantic network” See claim 3 of Warthen. In particular:
  - “Consulting a semantic network” corresponds to “matching the query with the semantic network” (col. 6, lines 64 – 67 of Warthen).
  - “A semantic network” (col. 6, lines 64 – 67 of Warthen).
  - “One or more word patterns in the incoming stream of text” corresponds to the result the parser and the normalizer.
- “Referencing a known object within the semantic network based on an identified word pattern from the stream of text, the known object identified by word pattern of the semantic network” See col. 6, lines 1 – 8 of Warthen. The

object corresponds to the question template and the answer to the question template that identified by the question.

Warthen discloses a method for retrieving a pattern in the database using a query pattern.

Warthen does not clearly say that each word is searched once in the semantic network.

However, Oyanagi, on the other hand, discloses a method for identifying objects referenced in a stream of text, comprising:

- "Receiving an incoming stream of text" See col. 5, lines 4 – 41. " An incoming stream of text" corresponds to the question/query (Does CLYDE own NEST 1?) that comprises plurality of words.
- "Consulting a semantic network to automatically identifying one or more word patterns in the incoming stream of text ("CLYDE" and "NEST 1") with a single examination of each word" See col. 5, lines 4 - 41. Oyanagi teaches that the word patterns "CLYDE – object" or "NEST1- value" are identified. The examination is completed in one circle (col. 5, lines 11 – 13.)
- "Referencing a known object within the semantic network, the known object identified by word pattern of the semantic network" See col. 5, lines 8 – 11, 14 – 28.

Oyanagi does not clearly teach that the query is parsed into individual word and formed a pattern. Warthen discloses a method for searching an object using query patterns and database pattern (claim 3 of Warthen).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Oyanagi into the invention of Warthen because Warthen suggest

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that the invention can be embodied in any number of different types of systems and executed in any number of different ways, as would be known by one ordinary skill in the art (col. 2, lines 45 – 48 of Warthen). The combination would also provide the user an organized database of patterns as suggested by Warthen using a semantic network, therefore, improve the time processing for the user by searching each word once.

◆ As per claims 2, 14, the Combination of Warthen and Oyanagi disclose:

- “Loading the semantic network substantially entirely into RAM memory of a processor” See Fig. 1a of Warthen.

◆ As per claims 3, 15, the Combination of Warthen and Oyanagi disclose:

- “Dividing the stream of text into a plurality of threads and conducting the step of consulting ... word patterns”.

Warthen teaches that the query is divided into keys, and each key is searched using database pattern (col. 5, lines 26 – 67, Warthen). This operation corresponds to the operation of “dividing the stream of text into plurality of thread” as claimed in the invention. Oyanagi also discloses this teaching in col. 5, lines 44 – col. 6, lines 23. Oyanagi teaches that a plurality of processing are executed. At least two processes are executed in parallel (memory 14, and 20, col. 4, lines 60 – 61, Oyanagi.) While the main memory searches for the object- values, the sub memory searches attributes that are not stored in main memory (col. 4, lines 45 – 48, Oyanagi).

◆ As per claims 4, 16, the Combination of Warthen and Oyanagi disclose:

- “Consulting a semantic network of recognized words and patterns of words in a hierarchical order moving from identified nodes to related nodes linked with the

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identified nodes” See Fig. 7 – 8 of Warthen and also Fig. 2, col. 4, lines 7 – 15 of Oyanagi.

♦ As per claims 5, 17, the Combination of Warthen and Oyanagi disclose:

- “Examining words in the stream of text in a sequential order as the words are received” See col. 2, lines 3 – 8 of Oyanagi.

♦ As per claims 8, 20, the Combination of Warthen and Oyanagi disclose:

- “Wherein the step of consulting a semantic network further comprises continually adding words of stream of text to recognized word patterns”. This limitation is corresponds the operation of dividing the query into keys in order to form a query pattern as disclosed by Warthen.

♦ As per claims 9 – 11, 21 – 22, the Combination of Warthen and Oyanagi disclose:

- “Presenting the identified known objects to a user” See col. 6, lines 38 – 39 of Warthen
- “Providing links between identified word patterns” See Fig. 7 – 8 of Warthen.
- “Displaying the word patterns corresponds to an object as a URL” See Fig. 4 of Warthen.

♦ As per claim 12,

Claim 12 is rejected based on the rejections of claims 1 – 5, 8 - 11.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 – 5, 8 – 17, 20 - 22 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Norbert Rimoux (U.S. 2004/0205035 A1) discloses a method and system for adaptive learning and pattern recognition.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CamLinh Nguyen whose telephone number is (571) 272 - 4024.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272 - 4146. The fax phone number for the organization where this application or proceeding is assigned is 571 - 273 - 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen, Cam-Linh

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